

CLAIMS:

1. A binding system for mounting a rider's foot to a recreational riding device, comprising:  
a base plate having an upper surface adapted to support a rider's foot, and an opposed,  
5 lower surface adapted to be oriented adjacent to and spaced apart from the recreation riding  
device;

a support base adapted to mate to a recreational riding device, the support base defining a  
central axis; and

a connecting element for mating the base plate to the support base, the connecting  
10 element being adapted to allow pivotal movement of the base plate about the central axis with  
respect to the support base.

2. The binding system of claim 1, wherein the connecting element comprises a support ring  
hingedly connected to the base plate to allow pivotal movement of the base plate, the support  
15 ring being adapted to mate to the support base.

3. The binding system of claim 2, wherein, at an interface between the support ring and the  
base plate, the support ring includes at least one slot formed therein for receiving at least one pin  
member formed on the base plate, the at least one slot and pin member being effective to prevent  
20 rotation between the base plate and the support ring.

4. The binding system of claim 2, wherein each of an inner surface of the support ring and  
an outer surface of the support base includes cooperating surface features formed thereon and  
effective to prevent rotational movement of the support ring with respect to the support base.  
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5. The binding system of claim 1, further comprising at least one compression member  
adapted to mate to at least one of the lower surface of the base plate and a recreational riding  
device, the at least one compression member being effective to compress between the base plate  
and the recreational riding device in response to a force applied to at least one of the base plate  
30 and the recreational riding device.

6. The binding system of claim 5, wherein first, second, third, and fourth compression members are mated to the lower surface of the base plate.

5 7. The binding system of claim 6, wherein at least one of the compression members is removably mated to the base plate.

8. The binding system of claim 6, wherein each of the first, second, third, and fourth compression members are spaced substantially equidistantly from one another and from a central axis of the base plate.

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9. The binding system of claim 5, wherein the at least one compression member is removably mated to the base plate.

15 10. The binding system of claim 1, wherein the base plate includes at least one flexible attachment member adapted to engaging a rider's foot.

11. The binding system of claim 1, wherein the base plate includes an engagement element formed thereon for mating with a corresponding engagement element formed on a boot worn by the rider.

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12. The binding system of claim 1, further comprising at least one locking member adapted to prevent pivotal movement of the base plate in a particular direction about the central axis.

25 13. A binding support system for mounting a rider's foot to a recreational riding device, comprising:

a base plate having a first surface adjacent to and spaced apart from a surface of a recreational riding device, and a second surface adapted to support the rider's foot; and

at least one connecting element adapted to connect the base plate to the recreational riding device such that the base plate is capable of pivotal movement about a fixed central axis.

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14. The binding support system of claim 13, further comprising a support base having a first end adapted to mount upon the recreational riding device, and a second end adapted to be oriented adjacent the rider's foot, the fixed central axis extending between the first and second ends of the support base, wherein the base plate includes a central opening adapted to surround the support base and the connecting element is adapted to connect the base plate to the support base.

15. The binding support system of claim 13, further comprising at least one compression member adapted to compress between the base plate and the recreational riding device in response to a force applied to at least one of the base plate and the recreational riding device.

16. The binding support system of claim 15, wherein the at least one compression member is mated to at least one of the base plate and the recreational riding device.

17. The binding support system of claim 14, wherein the connecting element comprises a support ring connected to the base plate to prevent rotational movement of the base plate with respect to the support ring, and a second portion mated to the support base.

18. The binding support system of claim 17, wherein a peripheral portion of the support ring is convex and interfaces with an inner, concave wall of the base plate that defines a central aperture of the base plate, the interface being effective to allow pivotal movement of the base plate with respect to the support ring.

19. The binding support system of claim 17, wherein, at an interface between the support ring and the base plate, the support ring includes at least one slot formed therein for receiving at least one pin member formed on the base plate, the at least one slot and pin member being effective to prevent rotational movement between the base plate and the support ring.

20. The binding support system of claim 17, wherein each of an inner surface of the support ring and an outer surface of the support base includes cooperating surface features formed thereon and effective to prevent rotational movement of the support ring with respect to the support base.

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21. The binding support system of claim 16, wherein first, second, third, and fourth compression members are mated to a lower surface of the base plate.

22. The binding support system of claim 16, wherein at least one of the compression members is removably mated to the base plate.

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23. The binding support system of claim 13, wherein the base plate includes at least one binding adapted to engaging the rider's foot.

24. A recreational riding device, comprising:  
an elongate board member having upper and lower surfaces;  
at least one binding support component comprising a base plate having an upper surface configured to support a rider's foot, and a lower surface configured to be oriented adjacent to and spaced a distance apart from the elongate board member;  
a support base removably mated to the elongate board member; and  
a connecting element adapted to connect the base plate to the support base and to allow pivotal movement of the base plate about the central axis with respect to the elongate board.

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25. The recreational riding device of claim 24, further comprising at least one compression member mated to at least one of the base plate and the recreational riding device and adapted to compress between the base plate and the recreational riding device in response to a force applied to at least one of the base plate and the recreational riding device.

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26. The recreational riding device of claim 24, wherein the at least one binding support component includes a binding member adapted to support the rider's foot.

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27. The recreational riding device of claim 24, further comprising at least one locking element effective to prevent pivotal movement of the base plate with respect to the elongate board member in a particular direction.

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28. The recreational riding device of claim 27, wherein the locking element is disposed between the base plate and the elongate board member.

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